

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-42 (Cancelled)

Claim 43 (Currently Amended): A process for purifying difructose dianhydride III (DFA III) having a purity based on dry weight of at least 70% (w/w) comprising:

contacting a DFA III containing solution containing DFA III at a purity based on dry weight of less than 70% (w/w), a R-Bx of 10 or more, and a DFA III purity based on dry weight of at least 60% (w/w), with active carbon particles for a time and under conditions sufficient for impurities to adsorb on the active carbon particles, wherein said active carbon particles are added in amount of 5% (w/w) or less based on the dry weight of the DFA III containing solution and the average particle size of the activated carbon particles ranges from 15 to 200 microns;

separating the solid and liquid phases of the resulting solution, and

recovering DFA III having a purity based on dry weight of [[at]] 70% (w/w) or more from the liquid phase;

thereby purifying DFA-III ~~difructose dianhydride III (DFA III)~~.

Claim 44 (Previously Presented): The process of claim 43, further comprising contacting under aeration the DFA III containing solution with a yeast that acts on disaccharides or monosaccharides other than DFA III to degrade or incorporate them into the yeast.

Claim 45 (Previously Presented): The process of claim 43, further comprising separating DFA III chromatographically from the recovered DFA III having a purity of 70% (w/w) or more based on dry weight.

Claim 46 (Currently Amended): The process of claim 43, further comprising:
contacting under aeration the DFA III containing solution with a yeast that acts on disaccharides or monosaccharides other than DFA III to degrade or incorporate them into the yeast; and
separating DFA III chromatographically from the DFA III containing solution or from the recovered DFA III having a purity of 70% (w/w) ~~w/w%~~ based on dry weight or more.

Claim 47 (Previously Presented): The process of claim 43, wherein said solid and liquid phases are separated by filtration.

Claim 48 (Previously Presented): The process of claim 43, further comprising crystallizing DFA III having a purity of at least 95% (w/w) based on dry weight from the recovered DFA III, wherein said crystallized DFA III lacks the smell of DFA III crystals produced by a method not employing the active carbon particles.

Claim 49 (Previously Presented): The process of claim 43, further comprising crystallizing DFA III having a purity of at least 99% (w/w) based on dry weight from the recovered DFA III, wherein said crystallized DFA III lacks the smell of DFA III crystals produced by a method not employing the active carbon particles.

Claim 50 (Previously Presented): The process of claim 43, wherein said DFA III containing solution is obtained by treating inulin with a fructosyltransferase, wherein the polymerization degree of fructose in said inulin is 10 or more.

Claim 51 (Previously Presented): The process of claim 43, wherein said DFA III containing solution is obtained by treating inulin with inulin fructotransferase, wherein the polymerization degree of fructose in said inulin is 10 or more.

Claim 52 (Previously Presented): The process of claim 43, wherein said DFA III containing solution is a solution produced by action of a fructosyltransferase on a fructose polymer or a material containing fructose polymer.

Claim 53 (Previously Presented): The process of claim 43, wherein said DFA III containing solution is a syrup suitable for crystallization and separation.

Claim 54 (Currently Amended): A process for producing difructose dianhydride III (DFA III) having a purity of at least 70% (w/w) based on dry weight, comprising:

contacting a crude solution containing DFA III at a purity based on dry weight of less than 70% (w/w) but more than 60% (w/w), with 5% (w/w), based on the dry weight of the DFA-III containing solution, of active carbon particles having an average particle size ranging from 15 to 200 microns for a time and under conditions sufficient for impurities to adsorb on the active carbon particles;

separating the solid and liquid phases of the resulting solution, and

recovering DFA III having a purity of at 70% (w/w) or more based on dry weight from the liquid phase;

thereby producing ~~difructose dianhydride III (DFA-III)~~ DFA-III having a purity of at least 70%.

Claim 55 (Previously Presented): The process of claim 54, wherein said crude solution is a DFA-III containing fraction obtained by chromatographic removal of saccharides other than DFA-III from a DFA-III containing solution.

Claim 56 (Currently Amended): ~~The process of claim 54~~ A process for producing difructose dianhydride III (DFA III) having a purity of at least 70% (w/w) based on dry weight, comprising:

contacting a crude solution containing DFA III at a purity based on dry weight of less than 70% (w/w) but more than 60% (w/w), with 5% (w/w), based on the dry weight of the DFA-III containing solution, of active carbon particles having an average particle size ranging from 15 to 200 microns for a time and under conditions sufficient for impurities to adsorb on the active carbon particles;

separating the solid and liquid phases of the resulting solution, and recovering DFA III having a purity of at 70% (w/w) or more based on dry weight from the liquid phase;

thereby producing DFA-III having a purity of at least 70% (w/w),

wherein said crude solution is produced by bringing a DFA-III containing solution into contact with yeast under conditions suitable for removing disaccharides other than DFA-III and/or monosaccharides from the DFA-III containing solution.

Claim 57 (Previously Presented): The process of claim 54, wherein said crude solution is produced by defecation and filtration of a DFA-III containing solution by adding active carbon followed by a solid-liquid separation.

Claim 58 (Previously Presented): The process of claim 54, wherein said crude solution has a concentration of R-Bx 60 or more.

Claim 59 (Previously Presented): The process of claim 54, further comprising recovering colorless and odorless DFA-III crystals having a purity of 95% (w/w) or more.

Claim 60 (Previously Presented): A process for producing difructose dianhydride III (DFA III) comprising:

providing a crude DFA III solution containing DFA III and impurities, wherein said crude DFA III solution has a purity based on dry weight of at least 60% (w/w);

adding up to 5% (w/w) of active carbon particles having an average particle size ranging from 15 to 200 microns to said crude DFA III solution for a time and under conditions sufficient for the impurities to adsorb onto the active carbon particles thus providing a treated crude DFA III solution;

separating the liquid and solid phases of said DFA III solution; and

recovering a purified DFA III solution.

Claim 61 (Previously Presented): The process of claim 60, wherein the crude DFA III solution is extracted from Jerusalem artichoke, burdock or chicory.

Claim 62 (Previously Presented): The process of claim 60, wherein the crude DFA III solution is produced by contacting a solution containing inulin with inulin hydrolase to produce DFA III and then deactivating the inulin hydrolase.

Claim 63 (Previously Presented): The process of claim 60, wherein the crude DFA III solution has an R-Bx of at least 60.

Claim 64 (Previously Presented): The process of claim 60, wherein the treated crude DFA III solution is filtered through diatomaceous earth and through a membrane filter prior to separating the liquid and solid phases.

Claim 65 (Previously Presented): The process of claim 60, wherein the recovered purified DFA III solution is further concentrated to form a liquid condensate, which is then crystallized.